

Title (en)
COMMUTATION CELL AND COMPENSATION CIRCUIT THEREFOR

Title (de)
KOMMUTIERUNGSZELLE UND KOMPENSATIONSSCHALTUNG DAFÜR

Title (fr)
CELLULE DE COMMUTATION ET CIRCUIT DE COMPENSATION ASSOCIÉ

Publication
EP 2982038 A4 20161123 (EN)

Application
EP 14779957 A 20140404

Priority

- US 201361808254 P 20130404
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- CA 2014000325 W 20140404

Abstract (en)

[origin: WO2014161080A1] The present disclosure relates to a commutation cell and to a compensation circuit for limiting overvoltage across the power electronic switch of the commutation cell and for limiting a recovery current in a freewheel diode of the commutation cell. The power electronic switch has a parasitic emitter inductance. A variable gain compensation circuit generates a feedback from a voltage generated across the parasitic inductance of the emitter of the power switch at turn-on or turn-off of the power electronic switch. The compensation circuit provides the feedback to a control of the power electronic switch to reduce the voltage generated on the parasitic emitter inductance. A power converter including the commutation cell with the compensation circuit is also disclosed.

IPC 8 full level
H03K 17/08 (2006.01); **H02M 1/32** (2007.01); **H03K 17/082** (2006.01); **H03K 17/16** (2006.01); **H03K 17/567** (2006.01)

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H02M 1/32 (2013.01 - US); **H02P 6/14** (2013.01 - US); **H03K 17/08** (2013.01 - US); **H03K 17/082** (2013.01 - EP US);
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H01L 2924/13055 (2013.01 - EP US); **H01L 2924/13091** (2013.01 - EP US); **H03K 17/166** (2013.01 - EP US); **H03K 17/168** (2013.01 - EP US);
H03K 17/567 (2013.01 - EP US)

Citation (search report)

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- [A] JP 2008235997 A 20081002 - MITSUBISHI ELECTRIC CORP
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Designated contracting state (EPC)
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JP 6611191 B2 20191127; KR 20150140304 A 20151215; US 10587257 B2 20200310; US 2016043711 A1 20160211

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